

Journal Question #1

Explain what it means to say $\lim_{x \rightarrow 4} x^2 = 16$.

Journal Question #2

Explain what it means to say $\lim_{x \rightarrow 4^+} x^2 = 16$.

Journal Question #3

- After initially evaluating a limit, describe what the following results would tell you what to do?

$$1. \lim_{x \rightarrow 2} f(x) = \frac{0}{5}$$

$$2. \lim_{x \rightarrow 2} f(x) = \frac{0}{0}$$

$$3. \lim_{x \rightarrow 2^+} f(x) = \frac{5}{0}$$

Journal Question #4

- Explain what the following limit tells you.

$$\lim_{x \rightarrow 1} f(x) = 6$$

Journal Question #5

- Explain what the following limit tells you.

$$\lim_{x \rightarrow -\infty} f(x) = 5$$

$$\lim_{x \rightarrow \infty} f(x) = -2$$

Journal Question #6

- Explain what the following limits tell you.

$$\lim_{x \rightarrow 3^-} f(x) = \infty$$

$$\lim_{x \rightarrow 3^+} f(x) = -\infty$$

Journal Question #7

- Explain how you know a function is continuous?